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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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PEARL COHEN ZEDEK LATZER, LLP 1500 BROADWAY, 12TH FLOOR NEW YORK, NY 10036			EXAMINER GHULAMALI, QUTBUDDIN	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/778,818	Applicant(s) OFIR ET AL.	
	Examiner Qutub Ghulamali	Art Unit 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Remarks/Amendments, filed by the applicant on 12/21/2005.

Response to Arguments

2. Applicant's Remarks/Amendments filed 12/21/2005, with respect to rejection of claims 1-8, 10-19, (pages 7-11) have been fully considered but they are not persuasive.

The applicant alleges that Tsern does not disclose all of the claim limitations of claims 1, 10 and 15 specifically “a radio frequency module adapted to receive communication signals and to store at least a portion of the received signals during a first time period and to de-activate during a second time period” and processor adapted to operate at a first clock rate during at least part of said first time period to de-activate the radio frequency for said second time period.

The Examiner's response: The examiner most respectfully would like to draw applicant's attention to Tsern that discloses radio frequency module wherein receivers (figs 7-9, elements 64, 78, 84) (and as best understood, the clocks are regarded as rf in signal sense) are adapted to (can be dynamically increased or decreased, a slower clock or a faster clock) receive at a first clock rate data via read data bus and stores said data (col. 2, lines 3-7; col. 5, lines 39-45) (separate clocks to different portions of the control circuitry create different clock domains) (col. 1, lines 30-34, 40-51; col. 4, lines 6-24, 36-40, 41-56). Tsern, further discloses as implicitly and explicitly implied background processing of at least a portion of received signal at a second faster clock rate (fast or slow clock rate depending upon the needed data bandwidth) when a read

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or write are performed (col. 4, lines 36-40, 41-57; col. 5, lines 10-15, 40-50, 62-67; col. 6, lines 1-6; col. 7, lines 7-17) and the unused receiver is preferably turned off (de-activated, the terms deactivation, activation are alternate to terms such as turn-off standby, turn-on, etc...) to conserve power. Additionally, the clock receiver as disclosed in Tsern is interpreted to be RF in the context of a frequency useful for radio transmission in the practicable limits of roughly 10 kHz and beyond which can be detected and amplified and Tsern shows them as clock receiver (84) and data receiver (78) (figs. 5, 6). Since Tsern discloses all limitations of claim 1, 10, and 15, applicant's assertion (pages 10-11, reference claims 2, 12 and 17) regarding Butler combination not meeting the requirements of obviousness is held moot. Thus as disclosed in Tsern, the examiner firmly believes the instant limitations of the claims 1, 10 and 15 (prior to and as amended) are properly and adequately addressed as indicated. Therefore, based on the explanation provided herein, the claimed rejection of claims 1-19 is still maintained.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 10 and 15 rejected under 35 U.S.C. 102(e) as being anticipated by Tsern et al (USP 6,263,448).

Regarding claims 1, 10 and 15, Tsern, discloses a system wherein method comprises:

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performing processing operations at a first clock rate during at least part of a first time period in which signals are received and stored by a Radio Frequency module (col. 1; lines 30-34, 40-51); and

performing background processing of at least a portion of said received signals at a second, faster clock rate during at least part of a second time period in which said Radio Frequency module is de-activated (col. 4, lines 16-52, 58-67; col. 5, lines 6-15, 25-34, 61-67; col. 6, lines 60-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-8, 11, 13, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsern et al (USP 6,263,448) in view of Challa et al (US Patent 6,453,181).

As per claim 3, Tsern discloses all limitations of the claim except Tsern, does not explicitly show use of CDMA processing of signals in wireless communication system. Challa, however, in a similar filed of endeavor discloses use of CDMA processing of signals in wireless communication system (col. 1, lines 15-25). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use CDMA processing of signals in wireless communication system as taught by Challa in the system of Tsern so as to make use of the techniques offered by CDMA slotted paging among communicating stations that helps in conserving power in transmission of signals.

Regarding claim 4, Tsern discloses all limitations of the claim above. Tsern however, does not explicitly show at least one of synchronizing pseudorandom noise (PN) offset of said received signals, searching for at least one neighboring communications cell and searching for at least one candidate communications cell. Challa, in a similar field of endeavor discloses performing at least one of synchronizing pseudorandom noise (PN) offset of said received signals, searching for at least one neighboring communications cell and searching for at least one candidate communications cell (col. 3, lines 7-10; col. 4, lines 46-59; col. 9, lines 17-25). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use synchronizing pseudorandom noise (PN) offset of said received signals, searching for at least one neighboring communications cell as taught by Challa in the system of Tsern because the use of synchronization cell search can reliably track the elapsed time even during the wake or sleep cycle.

As per claim 5, Tsern discloses all limitations of the claim above except, does not explicitly disclose detecting a current pseudorandom noise (PN) offset of said received signals, and, if different from a previous PN offset, shifting to the current PN offset. Challa in a similar field of endeavor further discloses detecting a current pseudorandom noise (PN) offset in said received signals, and, if different from a previous PN offset, shifting to the current PN offset (col. 2, lines 37-46). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use pseudorandom noise (PN) offset in said received signals, and, if different from a previous PN offset, shifting to the current PN offset taught by Challa in the system of Tsern because the use offset in communication of signals can allow precise time correlation of signals and increases timing accuracy.

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Regarding claim 6, Tsern discloses all limitations of the claim above except, does not explicitly disclose receiving a carrier during at least part of said second time period. Challa, however, in a similar field of endeavor discloses receiving a carrier during at least part of said second time period (col. 2, lines 37-48). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use synchronizing pseudorandom noise (PN) offset of said received signals, searching for at least one neighboring communications cell as taught by Challa in the system of Tsern because the use offset in communication of signals can allow precise time correlation of signals and increases timing accuracy.

With reference to claim 7, Tsern discloses all limitations of the claim above except, does not explicitly disclose receiving signal at least one wake period of a slotted mode. Challa, in a similar field of endeavor discloses receiving a carrier during at least one wake period of a slotted mode mode (col. 2, lines 33-46). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have at least one wake period of a slotted mode as taught by Challa in the system of Tsern because it can provide dynamic operation during paging modes.

As per claim 8, Tsern discloses all limitations of the claim above except, does not explicitly disclose reducing the power consumed during said at least one wake period after receiving said received signals. Challa, in a similar field of endeavor discloses reducing the power consumed during said at least one wake period after receiving said received signals (col. 2, lines 17-40; col. 3, lines 1-10). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to reduce power consumed during said at least one wake

period after receiving said received signals as taught by Challa in the system of Tsern because it can minimize and conserve the use of power.

Regarding claims 11, 13, 16 and 18, Tsern discloses all limitations of the claim above except, does not explicitly disclose a memory device adapted for storing therein said portion of received signals, and said processor comprises a digital processing unit, wherein said memory device is adapted to input said portion of received signals to said digital processing unit. Challa, in a similar field of endeavor discloses a memory device adapted for storing therein said portion of received signals adapted to input said portion of received signals to said digital processing unit (col. 6, lines 9-23; col. 10, lines 12-38). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to make use of the memory device for storing signals during operation as taught by Challa in the system of Tsern because it can minimize and conserve the use of power.

7. Claim 2, is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsern et al (USP 6,263,448) in view of Butler (US Patent 6,584,313).

Regarding claim 2, Tsern discloses every feature of the claimed invention, but is silent regarding background process operation comprise processing spread spectrum signals. Butler in a similar field of endeavor discloses offline page of monitoring signals as background process operation (scheduled communication) in a spread spectrum communication environment within a CDMA system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have signal processing in the background in a multiple access communication system as taught by Butler in the system of Tsern so as to permit spread of

information and at the same time conserve power by processing page messages in the background (col. 1, lines 14-24; col. 3, lines 58-67; col. 4, lines 1-9).

8. Claims 12 and 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsern et al (USP 6,263,448) in view Sih et al (US Patent 6,608,858).

Regarding claims 12 and 17, Tsern discloses all limitations of claims 10, 15 highlighted above. Tsern though discloses appropriate memory registers for storing said portion of received signals, Tsern, however, does not explicitly disclose a rake and search engine, wherein said memory device is adapted to input portion of received signals to said rake receiver and search engine. Sih in a similar field of endeavor discloses a rake receiver and searcher engine (searchers), adapted to input portion of received signals to said rake receiver and search engine (searchers) (col. 3, lines 1-14; col. 4, lines 45-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use rake receiver with searchers for inputting portion of received signals from memory as taught by Sih in the system of Tsern so as to improve frequency tracking loop and reduce timing errors (col. 11, lines 27-29).

As per claims 14 and 19, Tsern further discloses sampling adapted to receive portion of received signals and to input portion of received signals to memory device (col. 1, lines 31-46; col. 3, lines 41-64).

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qutub Ghulamali whose telephone number is (571) 272-3014. The examiner can normally be reached on Monday-Friday, 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QG.
March 17, 2006.


JEAN B. CORRIELUS
PRIMARY EXAMINER

3-20-06